Difficulties faced by the Spanish Health Care Systems in the Ebola epidemic

12 October 2014

The Spanish Health Care System (HCS) covers nearly all of the country's population, in accordance to the right to universal health care granted by the Spanish Constitution. Our HCS is decentralised into 17 HCS, one for each Autonomous Community, being Autonomous Governments responsible for the budget and management of each system.

The Spanish Ministry of Health (SMH), among other tasks, is in charge of public health programs, which currently involves Ebola's management in our country. Since the alarm started in Africa, guidelines have been provided both by the SMH and the Health Departments of every Autonomous Community. Their purpose was to settle specific actions and protocols to be followed in the case of facing a patient suspicious of having acquired the Ebola infection in Africa arriving into our country. As a result, each Autonomous Community selected up to two hospitals as reference centres for the admission of these patients. These hospitals were chosen on the basis of having already prepared isolation rooms, as well as experts on infectious diseases and microbiologists capable of managing suspicious Ebola patients and their specimens. On his behalf, the SMH, in accordance with Madrid Autonomous Community, selected the facilities of the Hospital La Paz-Carlos III (located in Madrid) as reference hospital for all the country. This hospital had had the tradition of being a reference centre for infectious diseases, including tropical medicine.

When sick patients started to arrive from Western African countries, where Ebola virus is striking hard (Liberia, Sierra Leone, Guinea Conakry) and also from Nigeria and Senegal, all the Autonomic Health Systems were challenged. Uniformly, these patients (mainly people with fever) were isolated in the corresponding hospitals, and blood samples were taken and sent to the Spanish National Reference Centre for Microbiology at the Institute Carlos III in Madrid to confirm or exclude the presence of Ebola virus by RT-PCR. Other microbiological analyses, such as malaria or dengue, were performed in each hospital once the patient was declared negative for Ebola. Also the Institute Carlos III performed these tests concomitant with the Ebola testing. To date (October 12th 2014), there has been no patient admitted to any of the hospitals of the Autonomous Communities who has been diagnosed of Ebola infection. Most of them were suffering from malaria.

However, two Spanish priest missionaries, who taking care of Ebola patients in Liberia and Sierra Leone, were repatriated to Spain in August and September. Unfortunately, both of them died few days after arrival, most likely due to the advanced stage of the disease and co-morbidities. As a consequence of taking care of the second patient, a nurse was infected, leading to what now is considered as the first case of Ebola transmission in Europe. In addition to the standard measures of care, health-care professional in charge of these patients have administered them WHO-permitted medications (monoclonal neutralizing antibodies, favipiravir, etc) in order to try to improve their prognosis.

From the health care point of view, the main problem the SMH had to face was to understand how the transmission to the nurse could have occurred in order to improve
general isolation protocols and clinical management guidelines in the future. Moreover, the management of the situation has also been challenging. During the first repatriation, no transmission was observed and protective measures in the patient’s treatment were adequate. On the other hand, the arrival of suspicious but Ebola virus non-infected patients to hospitals of the Autonomous Communities has challenged these hospitals; with no noticeable problems in the launch of protection measures during the diagnosis and treatment of patients. This was considered a good training for health care professionals and a global experience to improve procedures in a real situation. Another problem for the SMH was how information on the disease and management of the situation was going to be handled and received by the media and the population. The continuous necessity of information in the era of immediate communications makes it very difficult to provide a unique and responsible message for the whole society. On October 11th, the Spanish Government created a Technical Expert Commission with the remit of advice, follow-up and information release concerning Ebola infection in Spain.

During the last weeks, the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC, www.seimc.org) has performed a big effort to communicate how transmission of Ebola is produced and has spread a message of serenity to the general population. Despite this fact, different debates raised, including the adequacy of repatriations, potential transmission of Ebola virus to companion animals and the follow up of the health care workers that were in contact with repatriated patients. The SEIMC has also started to advice SMH on technical protocol issues concerning Ebola viruses, such as identification and management of potential new cases and the implementation of an active follow up of health care workers that have been in contact with Ebola patients.

Finally, thanks to the review of protective measures and the efforts made by all professionals taking part in the care of infected patients, we are now more confident in the prevention of new cases of Ebola transmission in our county. On the other hand, international efforts made to improve our knowledge of Ebola virus infection, treatment and prevention and to help African countries will lead, in a reasonable time period, to the resolution of Ebola epidemic in Western African countries.

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